

AMENDMENTS TO THE SPECIFICATION:

Please replace the last full paragraph bridging pages 5-6 of the specification with the paragraph below:

FIG. 5 illustrates the maximum dimensions for the above discussed prior art implants A and B to be safely contained within the spine so that a corner LC or LC' of the trailing end (side wall to trailing end junction) or the most rearward extension of that sidewall does not protrude outward beyond the rounded contour of the anterior (front) or the anterolateral (front to side) aspect of the vertebral bodies. Prior art implant A maximizes length, but sacrifices width and for the most part fails to sit over the best supportive bone peripherally of the apophyseal rim as previously shown in FIG. 1. Prior implant B maximizes width, but sacrifices length and again fails to sit over the best structural bone located peripherally in the apophyseal rim of the vertebral body, comprising of the cortex and dense subchondral bone. Both prior art implants A and B fail to fill the area available with a loss of both vital surface area over which fusion could occur and a loss of the area available to bear the considerable loads present across the spine.

Please replace the last full paragraph bridging pages 8-9 of the specification with the paragraph below:

In one embodiment of the present invention, an implant for insertion from the anterior approach of the spine and for achieving better filling of the anterior to posterior depth of the disc space between two adjacent vertebral bodies comprises opposed arcuate portions for penetrably engaging the bone of the adjacent vertebral bodies deep into ~~to~~ the boney endplate, a leading end which is inserted first into the disc space, and an opposite trailing end. The trailing end of this embodiment of the implant of the present invention is generally configured to conform to the natural anatomical curvature of the perimeter of the anterior aspect of vertebral bodies, such that when the implant is fully inserted and properly seated within and across the disc space, the surface area of the

vertebral bone in contact with the implant is maximized safely. Moreover, the implant of the present invention is able to seat upon the dense compacted bone in the perimeter of the vertebral bodies for supporting the load through the implant when installed in the intervertebral space.

Please replace the fifth full paragraph on page 13 of the specification with the paragraph below:

FIG. 6B shows in outline form the optimal area available to be occupied by one fusion implant ~~400~~ 100 to be inserted into the intervertebral space in side by side pairs.

Please replace the last full paragraph bridging pages 13-14 of the specification with the paragraph below:

With reference to FIGS. 6C, 7A, and 7B, a first embodiment of the present invention comprising an interbody spinal implant generally referred by the numeral 100, is shown inserted from the anterior aspect of a vertebral body V to each side of the midline M in the lumbar spine. In one embodiment of the present invention, implant 100 has a leading end 102 for insertion into the disc space, an opposite trailing end 104 configured to generally conform to at least a portion of the natural anatomical curvature of the anterior aspect of the vertebral bodies adjacent the disc space, and more narrowly to be foreshortened at that aspect of the implant trailing end, that would be most lateral within the disc space when implanted within the spine. Implant 100 has opposed arcuate portions 106 and 108 that are oriented toward and adapted to penetrably engage within the adjacent vertebral bodies when inserted across the intervertebral space. Opposed arcuate portions 106 and 108 have a distance therebetween defining an implant height greater than the height of the disc space at implantation. Preferably, each of the opposed arcuate portions 106 and 108 have at least one opening 110 in communication with one another to permit for the growth of bone in continuity from the adjacent vertebral bodies and through implant 100, and as herein shown implant 100 may further be hollow or at least in part hollow.

Implant 100 may also include surface roughening such as thread ~~100-120~~ for penetrably engaging the ~~boned~~bone of the adjacent vertebral bodies.

Please replace the second full paragraph on page 15 of the specification with the paragraph below:

As shown in FIG. 7A, trailing end 104 may be configured to complementary engage ~~and an~~ instrument 130 for driving implant 100 into the installation space. Instrument 130 may have a centrally disposed projection 132 and an off-center projection 134 for engaging recesses 142 and 144 of trailing end 104, respectively. Projection 132 is preferably threaded as is recess 142.

Please replace the first full paragraph on page 18 of the specification with the paragraph below:

FIG. 12B is a top plan view of the endplate region of the vertebral body of FIG. 11 with an alternative embodiment of first and second implants 450a and 450b of the present invention implanted translaterally across the transverse width of the vertebral body from a lateral aspect of the spine. Implants 450a and 450b are configured such that when they are installed, they have a general configuration similar to a single implant 400 described above. Typically, ~~implant~~ implant 450a is inserted into the implantation space first, and then implant 450b is inserted into the same implantation space behind, and preferably coaxial to, implant 450a in a "box car" arrangement.

Please replace the second full paragraph on page 19 of the specification with the paragraph below

Trailing end 454a of implant 450a is preferably flat or indented concavely, and may include a threaded opening 480 and a slot 482 for engaging insertion instrumentation for driving the implants. The leading end 452b of implant 450b may be flat, preferably with a bevel, chamfer, or radius, or convex to fit into the trailing end 454a of implant 450a. The radius of the leading flat edge of leading end 452b of implant 450b allows implant 450b to thread into an already tapped

path created by the insertion of implant 450a and permits the external thread of implants 450a and 450b to functionally align easily.

Please replace the first full paragraph on page 21 of the specification with the paragraph below

The implants of the present invention can be configured to have a maximum distance from a horizontal plane HP perpendicular to and bisecting a length along the mid-longitudinal axis MLA of the implant and the trailing end of the implant that is greater than the distance from the horizontal perpendicular plane HP to the trailing end of at least one of the opposite side walls of the implant. This maximum distance may be greater than the distance from the perpendicular plane HP to the trailing end of both of the side walls, or the distance from the perpendicular plane HP to the trailing end of the second side wall can be greater than the distance from the perpendicular plane HP to the trailing end of the first side wall. Alternatively, the distance from the perpendicular plane to the trailing end of the second side wall can be greater than the distance along the mid-longitudinal axis from the perpendicular plane HP to the trailing end and greater than the distance from the perpendicular plane HP to the trailing end of the first side wall. The implants of the present invention may also have a maximum first length L measured along a first implant side wall ~~that~~ that is longer than a second maximum length S measured along a second implant side wall.